

WHAT IS CLAIMED IS:

1. A pepper grinder, comprising
  - a housing, the housing having a holding room, and a holed transverse  
5 support plate above the holding room;
  - a grinding mechanism including both an outer wheel securely  
positioned in a lower end of the holding room of the housing and an  
angularly displaceable inner wheel positioned within the outer  
wheel;
  - 10 a rotary sleeve positioned above the grinding mechanism and  
supported on the transverse plate of the housing; the inner wheel  
being connected with a shaft joined to the rotary sleeve so as to be  
angularly displaceable together with the rotary sleeve; the rotary  
sleeve having a plurality of spaced spiral-curved guiding grooves on  
15 a cylindrical surface thereof, and upright guiding grooves spaced  
between the spiral-curved guiding grooves; each upright guiding  
groove being connected to two adjacent spiral-curved guiding  
grooves at upper and lower ends thereof; and
  - a depressed sleeve positioned above the rotary sleeve for effecting  
20 angular displacement of the rotary sleeve; the depressed sleeve  
having a plurality of protrusions on an inner side; the depressed  
sleeve being biased upwards by a spring such that when it is not  
being depressed, it is fitted over an upper end portion of the rotary

sleeve, and the protrusions are fitted in upper ends of corresponding spiral-curved guiding grooves;

thus allowing the inner wheel to be turned in single direction relative to the outer wheel to crush pepper corns between the wheels when the depressed sleeve is moved up and down repeatedly.

2. The pepper grinder as claimed in claim 1, wherein an actuating lever is pivoted to the housing, which lever has an operated portion projecting out from the housing as well as a convex contact portion opposing a top of the depressed sleeve.

10 3. The pepper grinder as claimed in claim 2, wherein the depressed sleeve has a groove on the top thereof, and the convex contact portion of the actuating lever is fitted in the groove of the depressed sleeve.

4. The pepper grinder as claimed in claim 2, wherein a connecting member is secured to the housing while the handle is pivoted to the connecting member.